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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,802	04/20/2004	Erin N. Rosskopf	0022.03	5070

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EXAMINER	
SCHLIENTZ, NATHAN W	
ART UNIT	PAPER NUMBER
1616	

MAIL DATE	DELIVERY MODE
07/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/828,802	ROSSKOPF ET AL.	
	Examiner	Art Unit	
	Nathan W. Schlientz	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) *3-8,14,16 and 17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,9-13,15 and 18-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *6/1/04 and 4/12/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The examiner for your application in the USPTO has changed. Examiner Nathan Schlientz can be reached at 571-272-9924.

Status of Claims

Claims 22-23 are newly added in an amendment filed 23 April 2007. As a result, Claims 1-23 are pending, and Claims 3-8, 14 and 16-17 are withdrawn from consideration. Thus, Claims 1-2, 9-13, 15 and 18-23 are examined herein on the merits for patentability. No claim is allowed at this time.

Withdrawn Rejections

1. The rejection of Claims 1-2, 9, 11-13, 15 and 18-21 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,622,976 (Hitchcock et al.) in view of DD 257379 A (Bergmann et al.) is hereby withdrawn by the examiner in light of neither Hitchcock et al. nor Bergmann et al. teaching bromoacetic acid as the active agent.

2. The rejection of Claim 10 under 35 U.S.C. 103(a) as being unpatentable over Hitchcock et al. in view of Bergmann et al. and U.S. Patent 3,975,181 (Watanabe et al.) is hereby withdrawn by the examiner in light of neither Hitchcock et al. nor Bergmann et al. nor Watanabe et al. teaching bromoacetic acid as the active agent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 9, 11-13, 15, 18 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,649,363 (hereinafter Swezey).

Swezey discloses a method of controlling plant growth by contacting said plants with a phytotoxic haloacetic acid compound, such as chloroacetic acid, bromoacetic acid and iodoacetic acid, wherein chloroacetic acid and bromoacetic acid compounds are preferred (column 1, lines 1-13; column 3, lines 8-13; Examples 1, 4, and 6; and Claims 1-5, 7 and 10). Swezey discloses the plant growth being controlled comprises Bermuda grass (*Cynodon dactylon*), Wild Mustard (*Synapis arvensis*), Burclover (*Medicago minima*), Prostrate Pigweed (*Amaranthus Albus*), sedge (*Cyperaceae*), filaree (*Erodium cicutarium/Erodium moshatum*), annual grasses, bull mallow (*Malva borealis*), wild oats, fiddleneck (*Phacelia tanacetifolia*), chickweed (*Cerastium* and *Stellaria*) and shepherds-purse (*Capsella bursa-pastoris*) (Examples 1-9), wherein plants are more readily controlled when in seedling stage or when putting out new and succulent growth (column 2, lines 49-53). Swezey further discloses that high spray volumes, such as 50 to 100 gallons per acre, may be employed to take advantage of the differential wetting obtained by large droplet size in situations where the crop has a foliage surface difficult to wet due to waxy leaf coating, or perpendicular position, or

other reasons (column 2, lines 25-31). Swezey further discloses that the haloacetic acid compound may be applied to the plants as a liquid or as a dust (column 1, lines 46-50; and column 2, lines 32-44).

It is noted that Swezey does not explicitly disclose applying the haloacetic acid compound onto the soil. However, Swezey discloses spraying the haloacetic acid compound dissolved in water, oil, an oil in water emulsion, etc., upon the plant surface with uniform dispersion of the chemical over the area under treatment through the use of standard spray equipment (column 1, line 46 through column 2, line 5). Therefore, uniform dispersion of the haloacetic acid over the area under treatment would inherently comprise spraying some of the haloacetic acid on the soil within the area under treatment.

Therefore, for the aforementioned reasons, Swezey anticipates all the limitations of the instant claims.

2. Claims 1, 11-12, 15 and 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent No. 57-200303 A (hereinafter Fuse et al.).

Fuse et al. disclose an antiseptic and antifungal preparation that is a liquid containing bromoacetic acid, wherein the active agent inhibits the growth of fungi (Abstract, "Purpose"). Fuse et al. further disclose bromoacetic acid either alone or in combination with other active agents is dissolved in water or an organic solvent and sprayed on the wood being treated (Abstract, "Constitution").

Therefore, for the aforementioned reasons, Fuse et al. anticipate all the limitations of the instant claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swezey, as applied to Claims 1-2, 9, 11-13, 15, 18 and 20-22 above, in view of U.S. Patent No. 3,975,181 (hereinafter Watanabe et al.).

Applicant claims:

The Applicant claims a method for reducing *Amaranthus hybridus*, *Echinocloa crus-galli* or *Cyperus rotundus* comprising administering bromoacetic acid to the weed or soil around the weed.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Swezey teaches a method of controlling plant growth by contacting said plants with a phytotoxic haloacetic acid compound, such as chloroacetic acid, bromoacetic acid and iodoacetic acid, wherein chloroacetic acid and bromoacetic acid compounds are preferred, and said plant includes sedge (*Cyperaceae*), as discussed above.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Swezey does not teach explicitly teach the species of sedge to be *Cyperus rotundus*. However, Watanabe et al. teaches a method of combating weeds including various species of sedge within the genus *Cyperus* comprising applying an effective amount of chloroacetic acid as a phytotoxicity agent to said weeds, cultivated crop plants, and/or soil (abstract; columns 1-3).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one skilled in the art at the time of the invention to apply bromoacetic acid to sedge plants, as taught by Swezey, and in particular *Cyperus* plants, as reasonably taught by Watanabe et al. One skilled in the art would have been motivated to apply bromoacetic acid to *Cyperus* weeds, which intrinsically includes *Cyperus rotundus*, because Swezey teaches bromoacetic acid and chloroacetic acid to be functional equivalents in the control of weeds, and

Watanabe et al. teach chloroacetic acid as an effective herbicide for the control of *Cyperus* weeds.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

2. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swezey in view of U.S. Patent No. 3,865,936 (hereinafter Lewis).

Applicant claims:

The Applicant claims a method for reducing pests in an object or area comprising administering bromoacetic acid to the soil via fumigating said soil.

Determination of the scope and content of the prior art

(MPEP 2141.01)

Swezey teaches a method of controlling plant growth by contacting said plants with a phytotoxic haloacetic acid compound, such as chloroacetic acid, bromoacetic acid and iodoacetic acid, wherein chloroacetic acid and bromoacetic acid compounds are preferred, as discussed above.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Swezey does not teach fumigating the soil in order to control said plants. However, Lewis teaches that chemicals which function as fumigants have been employed since the 1940's or earlier, and thousands of acres are fumigated annually with the increased yields afterwards outweighing the costs (column 1, lines 14-25). Lewis further teaches that weeds have been adequately checked by soil fumigation (column 1, lines 26-28).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one skilled in the art at the time of the invention to apply bromoacetic acid, as taught by Swezey, to the soil by fumigation in an attempt to control weeds, as reasonably taught by Lewis. One skilled in the art would have been motivated to fumigate soil with the bromoacetic acid composition of Swezey in an attempt to control weeds because Lewis teaches that the value of fumigation is much more than the investment.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments with respect to Claims 1-2, 9-13, 15 and 18-21 have been considered but are moot in view of the new grounds of rejection.

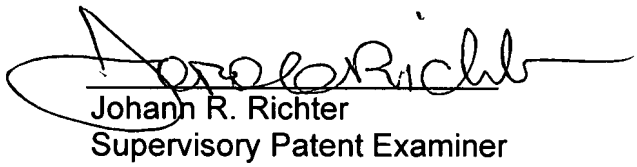
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Schlientz whose telephone number is 571-272-9924. The examiner can normally be reached on 8:30 AM to 5:00 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan W. Schlientz
Patent Examiner
Technology Center 1600
Group Art Unit 1616



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